Do Teachers Need Support to Teach Students with Specific Learning Disabilities?

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Introduction

As the number of students being identified with specific learning disabilities (SLD) continues to grow it is important to find new and innovative methods for differentiated instruction. Increased SLD enrollment in school-based agricultural education (SBAE) programs challenges agricultural educators to teach a diverse group of students (Ross, 2006). Pense (2009) found that SBAE programs in Illinois had at least 23% of students in the classrooms identified with SLD. SLD students are supported by the curricular structure of the SBAE programs' focus towards hands on activities and real-world application (Kessel, Wingenbach, & Lawver, 2009). If SLD students' needs are not accommodated the agricultural industry faces a risk of losing up to 25% of the workforce (Pirtle, 2012) because students may become disengaged and explore other career options. Hoerst and Whittington (2009) stated that many secondary agricultural education teachers need to be aware of more teaching techniques for inclusion to use within the classroom. Kessell, et al. (2009) found that many teachers took a special education course either required by their program or as an elective, but special education courses alone did not always prepare teachers for working with SLD students and teachers were not always provided additional support within the classroom to properly engage and educate SLD students (Hoerst & Whittington, 2009). Agricultural education teachers need continuous support and professional development (PD) to assure they meet the needs of the diverse learners in their classrooms.

Theoretical Framework

The theoretical framework for this research was based on the concept of efficacy. Bandura and Adams' (1977) early research analyzed self-efficacy as a conviction that a desired goal can be accomplished through preforming certain behaviors (Stair et al., 2010). If teachers feel confident that the strategies they use within the classroom help students to perform better academically then these strategies will continue to be used. Teachers need to continue to improve their own competency with new strategies they gain through PD opportunities. We sought to determine teacher needs related to their experience with SLD students in order to assist with identifying PD to support an increase in their self-efficacy.

Methodology

The purpose of this study was to determine perceived use and effectiveness of teaching strategies utilized by teachers in SBAE programs based on recommended practices and to determine teacher's desire/need for PD. Objectives guiding this study were to 1) describe teacher's perceived use and effectiveness of recommended differentiated instructional strategies and 2) determine teacher's desire/need for PD opportunities related to working with SLD students. The population for this study was a national sample of agricultural educators who taught an entry level SBAE course. Both middle and high school instructors were included. The criteria also included enrollment of SLD students in the course. A list of state staff was obtained and each state staff director was contacted through email and asked to recommend teachers that met the criteria for the research. Once the contact information for the population frame (N = 216) was received and entered into a spreadsheet, teachers were emailed a message making them aware that their state staff director recommended them for the study. Data collection occurred during November and December of 2017 and followed Dillman's tailored design method (Dillman, Smyth, & Christian, 2009). The instrument was created and administered using Qualtrics. The first section was modified from previous research (Stair, et al., 2010) to identify commonly used strategies when working with SLD students. Internal consistency was analyzed for reliability using Cronbach's alpha. Analysis indicated $\alpha = .632$ for perceived use and $\alpha = .835$ for

effectiveness. A Likert-type scale was used to determine the teacher's need or desire for more PD opportunities to teach SLD students. Cronbach's alpha of .7 was obtained for PD. A response rate of 69% (n = 146) was achieved. Objective two determined teachers' desire or need for more PD opportunities related to working with SLD students. Teachers were asked to respond to eleven statements by stating if they strongly agreed, agree, disagreed, or strongly disagreed. Some statements were reverse coded.

Findings

The majority (54.03%) of the respondents were female. Age ranged from 23 to 59 with a mean age of 38. Years of teaching experience ranged from first year teacher to more than 30 years of experience with the majority (30.9%) between one to five years of experience. The percentage of students with an Individual Education Plan (IEP) or 504 Plan in entry level agricultural education classes had a mean of 20.98 and standard deviation of 16.72. To determine how often strategies were being used by entry level agricultural educator's data was collected, averaged and ranked. Teachers described "read a students' IEP and provide those modifications (M = 4.54), meaningful learning (engaging tasks and graphics, elaboration, etc.) (M = 4.14), and test modifications (extended time, separate testing location, no penalization for spelling errors, word banks, oral exams/presentations)" (M = 4.04) as the most used strategies. The least used strategies identified by teachers were utilization of computer-based instruction (M = 3.14) and support outside of class (tutoring) (M = 3.06). Respondents were asked to rank eight strategies on a scale of one to five with one being very ineffective and five being very effective. Teachers identified "meaningful instruction (engaging tasks and graphics, elaboration, etc.)" as the most effective strategy (M = 1.75). The least effective strategy reported was utilization of computer-based instruction (M = 2.47). Teachers indicated if they were provided the opportunity to attend PD they would, but work schedule was identified as a barrier to participate in PD.

Conclusions

It is encouraging to conclude agricultural education teachers use a variety of strategies when working with SLD students. Typically strategies used are those in which teachers feel they are more effective aligning with self-efficacy theory (Bandura & Adams, 1977). Strategies are being utilized by teachers and are beneficial for all students, not just SLD students. The majority of teachers who responded were in their first five years of teaching and have completed at least one special education course that was required by their certification program. Providing teachers with opportunities to attend PD is important. Financial need or lack of resources may be the reason that strategies such as computer-based instruction are not being utilized within the classrooms.

Recommendations

Further explanation of the depth of differentiated instructional strategies used by teachers would be beneficial. Qualitative data collection using focus groups to determine specific strategies used and determined to be effective beyond those in this study is recommended. Focus groups should also include questions to determine barriers for why teachers are unable to attend PD. Support is needed. We recommended that state staff and/or school districts consider ways to provide support for agricultural education teachers to attend PD related to inclusion and differentiated instruction. Collaboration among the special education department and the SBAE program would prove to help better support teachers and SLD students; cooperation is highly recommended.

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